

REMARKS

No claims are amended, no claims are canceled, and no claims are added; as a result, claims 1-2 and 6-23 are now pending in this application.

Double Patenting Rejection

Claims 1, 2, and 6-23 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-24 of U.S. Patent No. 6,687,539 in view of Struble et al. (U.S. Patent No. 6,122,545, hereinafter "Struble").

Claims 1, 2 and 6-23 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,304,778 in view of Struble.

Applicants traverse these rejections of the claims. Applicants disagree that the statements of the rejections above are a proper nonstatutory obviousness-type double patenting rejection.

According to the M.P.E.P.:¹

Obviousness-type double patenting requires rejection of an application claim when the claimed subject matter is **not patentably distinct** from the subject matter claimed in a commonly owned patent, or a non-commonly owned patent but subject to a joint research agreement as set forth in 35 U.S.C. 103(c)(2) and (3), when the issuance of a second patent would provide unjustified extension of the term of the right to exclude granted by a patent.² (Emphasis in original).

Thus, obviousness-type double patenting requires rejection of an application claim when the claimed subject matter is not patentably distinct from the subject matter claimed in a commonly owned patent, or a non-commonly owned patent subject of joint research agreement as set forth in 35 U.S.C. 103(c)(2) and (3). Here, the Office Action is not using a [single] commonly owned patent, or a [single] non-commonly owned patent as set forth in 35 U.S.C. 103(c)(2) and (3), in these double patenting rejections. Instead the Office Action's nonstatutory obviousness-type double

¹ See Manual of Patent Examining Procedure, 8th Ed., Rev. 7, July 2008, § 804 II B. 1.

² See *Eli Lilly & Co. v. Barr Labs., Inc.*, 251 F.3d 955, 58 USPQ2d 1869 (Fed. Cir. 2001); *Ex parte Davis*, 56 USPQ2d 1434, 1435-36 (Bd. Pat. App. & Inter. 2000).

patenting rejections reject the claims based on either U.S. Patent U.S. Patent No. 6,687,539 or U.S. Patent No. 6,304,778, both in view of Struble, which involves a rejection based on *two* patents.

Further, the Office Action has provided no evidence of record to show that Struble is a commonly owned patent, or otherwise meets the requirements of nonstatutory obviousness-type double patenting as quoted above, in forming these nonstatutory obviousness-type double patenting rejections.

Instead, it appears that the Office Action is actually making a 35 U.S.C. 103 type rejection by combining two separate U.S. patents in each of these rejections in order to form the rejections.

Applicants respectfully submit that this is an improper rejection, as neither of these rejections are properly based under nonstatutory obviousness-type double patenting. Therefore, Applicants traverse this rejection as improper. Further, Applicants respectfully request that these rejections be withdrawal.

However, and only in order to be considered to have been fully responsive to the Office Action, Applicants respectfully submit the following:

Applicants do not admit that claims 1-2 and 6-23 are obvious in view of claims 1-24 of U.S. Patent No. 6,687,539, or that claims 1-2 and 6-23 are obvious in view of claims 1-7 of U.S. Patent No. 6,304,778. Applicants will revisit the issue and, if appropriate, submit a terminal disclaimer to obviate these rejections when the claims in the application are otherwise considered allowable.

§102 Rejection of the Claims

Claims 1, 2, 8, 11-15, 17-19 and 22-23 were rejected under 35 U.S.C. §102(e) for anticipation by Struble et al. (U.S. Patent No. 6,122,545). Applicants respectfully traverse the rejection of claims 1, 2, 8, 11-15, 17-19 and 22-23.

Applicants maintain that claims 1, 2, 8, 11-15, 17-19 and 22-23 are not anticipated by Struble because, as stated in Applicants' previous submitted response in the present application,³

Struble fails to identically meet each and every requirement of claims 1, 2, 8, 11-15, 17- 19, 22, and 23. The follow arguments were presented in the Applicants' previous response:⁴

For example, Struble fails to meet independent claim 1's requirement of:

"circuitry for blanking sensing of atrial electrical signals in the monitoring circuitry for a period of time following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber blanking settings."

In contrast to independent claim 1, Struble is concerned with, "the possibility exists that *a pacing pulse* will be delivered across the above-described right or left heart chamber pace/sense electrodes, *and the delivered pacing pulse energy will appear across the other set of pace/sense electrodes* masking the conducted P-wave or R-wave."⁵ (Emphasis added). Thus, Struble concerns pacing pulse energy appearing at the pace/sense electrodes, and thus masking the conducted P-wave or R-wave. Struble further states:⁶

'This is particularly the case when relatively short CDW times are programmed to optimize timing of the synchronous depolarization of the right and left heart chambers and conventional high gain sense amplifiers are employed. Thus, **each sense amplifier for each pacing channel will require its own specific programmable blanking periods to avoid this problem and the problem of saturation of the sense amplifiers.** For conventional, high gain sense amplifiers, the blanking periods are programmed in the range of 100 msec. Much shorter blanking periods can be used with the FDC sense amplifiers. Refractory periods of the sense amplifiers are also programmable in the range of 20-350 msec for atrial channel sense amplifiers and 150-500 msec for ventricular channel sense amplifiers. During the refractory periods, sensed events will not be allowed to reset the pacing escape interval or AV delay being timed out.' (Emphasis added).

⁴ See Applicants' response electronically filed on April 16, 2008 in the present application using the EFS-Web system

⁵ See Struble at column 25, line 64 through column 26, line 2.

⁶ See Struble at column 26, lines 2-18.

Thus, the programmable blanking periods in Struble are intended to avoid the problem of pacing pulse energy appearing across the pace/sense electrodes and thus masking a conducted P-wave or R-wave. However, such a description fails to identically meet the requirement of independent claim 1 of "circuitry for blanking sensing of atrial electrical signals in the monitoring circuitry for a period of time following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber blanking settings." Because Struble fails to meet this requirement, it does not anticipate claim 1.

Similarly, Struble fails to meet all the requirements of independent claims 2, 8, 11, 17, and 22. Independent claim 2 requires "a cross-chamber-blanking module for disabling sensing signals at either the first or second lead for a preset time period following sensing a last ventricle beat of the heart and based on at least one of the cross-chamber-blanking settings."

Independent claim 8 requires "a cross-chamber-blanking module responsive to at least one of the one or more cross-chamber-blanking settings for disabling sensing signals at the first or second lead or for ignoring signals at the first or second lead for a time period following sensing a last ventricle beat of the heart and based on at least one of the stored cross-chamber blanking settings."

Independent claims 11 and 17 require "a cross-chamber-blanking module for disabling sensing signals at either the first or second lead for a preset time period following a sensing of a last ventricle beat of the heart and based on at least one of the cross-chamber-blanking settings."

Independent claim 22 require "a cross-chamber-blanking module for disabling sensing signals at either the first or second lead for a preset time period following sensing a last ventricle beat of the heart and based on at least one programmable cross-chamber-blanking setting."

Thus, at least these requirements of independent claims 2, 8, 11, 17, and 22 are not anticipated by Struble.

Claims 12-15, 18-19, and 23 depend from one of independent claims 11, 17, and 22. Thus, they distinguish from Struble for at least the reasons highlighted above for independent claims 11, 17, and 22.

For at least these same reasons, Applicants maintain that claims 1, 2, 8, 11-15, 17-19 and 22-23 are not anticipated by Struble, and therefore the current Office Action fails to state a *prima facie* case of anticipation with respect to claims 1, 2, 8, 11-15, 17-19 and 22-23.

In response to the above quoted and previously submitted, arguments, the current Office Action states:⁷

"In addition to the comments made in the previous office action, Struble is considered to teach blanking atrial signals following sensing a last ventricle beat, see for example claim 25 of Struble were it is taught that atrial blanking means are activated in response to a ventricle pacing pulse, *which would cause a beat to take place in the ventricle.*" (Emphasis added)

However, the above statements in the Office Action include statements not supported by the actual language of claim 25 in Struble. The actual language of claim 25 in Struble recites:⁸

"25. The four channel pacing system of claim 23, further comprising:

right atrial blanking means for preventing the sensing of spontaneous and evoked cardiac depolarizations in the right atrium and the provision of a right atrial sensed event signal in response thereto for the duration of a right atrial blanking period **in response to the generation of right and left atrial pacing pulses and a ventricular pacing pulse;** and

left atrial blanking means for preventing the sensing of spontaneous and evoked cardiac depolarizations in the left atrium and the provision of a left atrial sensed event signal in response thereto for the duration of a left atrial blanking period **in response to the generation of right and left atrial pacing pulses and a ventricular pacing pulse.**" (Emphasis added).

Thus, claim 25 includes, "in response to the generation of right and left atrial pacing pulses and a **ventricular pacing pulse.**" However, there is no recitation in claim 25 of, "which would cause a beat to take place in the ventricle," as implied by the language of the Office Action as quoted above. The Office Action fails to provide any evidence of record that the language of claim 25 *necessarily* includes "which would cause a beat to take place in the ventricle."

⁷ See the Office Action mailed June 9, 2008 in the present application at page 2.

⁸ See Struble at claim 25 at column 35, lines 50-65.

In addition, even if this statements in the Office Action were true (wherein Applicants do not admit or agree that the statement is true), this recitation would still fail to disclose the subject matter of, for example, independent claim 1. As noted above, independent claim 1 recites:

"circuitry for blanking sensing of atrial electrical signals in the monitoring circuitry for a period of time **following sensing a last ventricle beat of the heart** and based on at least one of the cross-chamber blanking settings." (Emphasis added).

Thus, independent claim 1 requires a blanking sensing of atrial electrical signal in the monitoring circuitry for a period of time **following sensing a last ventricle beat of the heart**.

The Office Action fails to show in Struble, or in any other evidence of record, at least this subject matter as included in independent claim 1. The Office Action's statement that a vertical pacing pulse would cause a ventricle beat, even if true fails to disclose, "following sensing a last ventricle beat of the heart," as required by independent claim 1. A ventricle beat of the heart is not the same thing as *sensing a last ventricle beat of the heart*, and so the Office Action's inferences that causing a ventricle beat discloses sensing a last ventricle beat of the heart fails to give proper weight to each and every word included in independent claims 1.

For at least these reasons, independent claim 1 is not anticipated by Struble. Applicants maintain, for at least the reasons as stated in this response and in Applicants' previous response, that claims 1, 2, 8, 11-15, 17-19 and 22-23 are not anticipated by Struble. Therefore, the Office Action fails to meet its burden for establishing a *prima facie* as of obviousness with respect to claims 1, 2, 8, 11-15, 17-19 and 22-23.

Applicants respectively request withdrawal of the rejection, and allowance of all claims now pending in the application.

§103 Rejection of the Claims

Claims 6, 7, 10, 16, 20 and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Struble et al. (U.S. Patent No. 6,122,545) in view of Wickham (U.S. Patent No. 5,891,171).

Claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Struble et al. (U.S. Patent No. 6,122,545) in view of van Lake (U.S. Patent No. 5,653,737).

Applicants respectfully traverse these rejections of claims 6-7, 9, 10, 16, and 20-21. As noted on Applicants previous response in the present application, each of these proposed combinations,⁹ even if permissible, do not meet all the requirements of claims 6-7, 9, 10, 16, and 20-21 because these extended combinations erroneously rely on Struble to meet the requirements of the independent claims from which claims 6-7, 9, 10, 16, and 20-21 depend.

As documented above, Struble fails to meet the requirements included in, for example, independent claims 1, 2, 8, 11, 17, and 23. For analogous reasons, Struble fails to meet the requirements included in any one of claims 6-7, 9, 10, 16, and 20-21.

The addition of Wickham and Lake fails to remedy these deficiencies in Struble. Thus, one of skill in the art would not regard any of these proposed combinations, as presented in the Final Office Action and as used the rejections of claims 6-7, 9, 10, 16, and 20-21, as meeting all of the requirements of claims 6-7, 9, 10, 16, and 20-21. Therefore, claims 6-7, 9, 10, 16, and 20-21 are not obvious in view of the proposed combinations used in the Final Office Action in the rejections of these claims.

Accordingly, Applicants request respectfully that the Examiner reconsider and withdraw the §103 rejections of claims 6-7, 9, 10, 16, and 20-21.

Reservation of Rights

In the interest of clarity and brevity, Applicants may not have addressed every assertion made in the Final Office Action. Applicants' silence regarding any such assertion does not constitute any admission or acquiescence. Applicants reserve all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicants do not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference,

⁹ Applicants do not admit or agree that any combination or combinations of Struble, Wickham, and Lake are possible.

Applicants timely object to such reliance on Official Notice, and reserve all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicants reserve all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney at (612) 371-2132 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 10 day of November 2008.

Name

Signature